4

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EXAMINER	
YIGDALL, MICHAEL J	
ART UNIT	**PAPER NUMBER**
2192	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/12/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	09/978,470	PLAIN ET AL.	
	Examiner	Art Unit	
	Michael J. Yigdall	2192	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 October 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,4-9,11-16 and 21-32* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,4-9,11-16 and 21-32* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This Office action is responsive to Applicant's submission filed on October 13, 2006. Claims 1, 2, 4-9, 11-16, 21-32 are now pending.

Response to Amendment

2. The objections to claims 4, 9, 11 and 16 set forth in the Office action mailed on April 13, 2006 are withdrawn in view of Applicant's amendment.

Response to Arguments

3. Applicant's arguments with respect to claims 1, 2, 4-9, 11-16, 21-27 and 31 have been fully considered but they are not persuasive.

Applicant contends that neither Cheng nor Oberhauser, alone or in combination, teach or suggest a "context state" that is separate from a "configuration state" (remarks, page 16).

However, the examiner does not agree with Applicant's characterization of Oberhauser. Applicant recognizes that Oberhauser teaches saving state information (step 135 in FIG. 6) and retrieving state information (step 143 in FIG. 6), but concludes that "the state information that was saved in step 135 is retrieved in step 143 with no teaching or suggestion of a 'context state' that is separate from a 'configuration state'" (remarks, page 16). Specifically, Applicant characterizes the state information of Oberhauser as a "configuration state," rather than as a "context state" as set forth in the Office action (remarks, page 15).

However, there is no apparent basis for Applicant's argument in the claims. For example, claim 1 recites, "A method of generating a configuration comprising a plurality of components each having an associated context, said associated context equal to one or more of a

plurality of values." Thus, a reasonable interpretation of the claimed subject matter is that the term "configuration state" refers to the components that are included within a configuration, while the term "context state" refers to one or more values associated with those components. Indeed, as Applicant implies (remarks, page 14), Cheng teaches a "configuration state" in terms of a software configuration comprising a plurality of software components. In Oberhauser, the state information noted above relates to online or runtime program data that is associated with a software component during its execution (see, for example, column 2, lines 26-40). This "context state" is separate from the "configuration state" of the software components, which instead differentiates the old version a program from a new version of the program (see, for example, column 4, lines 26-52). Furthermore, while Applicant notes that the teachings of Oberhauser emphasize state data (remarks page 16), this is not evidence that the state data or state information is necessarily a "configuration state" rather than a "context state."

Moreover, the rejection is based on a combination of Cheng and Oberhauser. One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981), and *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

4. Applicant's arguments with respect to claims 28-30 and 32 have been considered but are moot in view of the new ground(s) of rejection, as set forth below with further reference to Taylor. Applicant's amendment necessitated the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1, 2, 4-8, 11-15, 21, 22, 24, 25, 27 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,151,643 to Cheng et al. (art of record, "Cheng") in view of U.S. Patent No. 6,314,567 to Oberhauser et al. (art of record, "Oberhauser").

With respect to claim 1 (currently amended), Cheng discloses a method of generating a configuration comprising a plurality of components each having an associated context (see, for example, column 2, line 62 to column 3, line 12, which shows generating a configuration of software components each having associated information), said associated context equal to one or more of a plurality of values (see, for example, column 10, lines 26-32 and 55-61, which shows that the associated information includes a context equal to one or more of a plurality of values, such as the configuration of the component when installed).

Cheng further discloses (a) storing the current state of the system in response to a requirement for the installation of a first component from the plurality of components, and (b) changing the current state of the system to a state corresponding to the information associated with the first component (see, for example, column 8, line 62 to column 9, line 16) if the first component is not installed (see, for example, column 14, lines 45-64). Cheng further discloses

(c) installing the first component as part of the system and (d) changing the state of the system (see, for example, column 8, lines 55-61). Cheng further discloses (e) restoring the stored state of the system after installing the component (see, for example, column 9, lines 28-55).

Cheng does not expressly disclose:

(a) storing a current first context state in response to a requirement for the installation of a first component, wherein the first component is one of the plurality of components;

(b) changing the current state of the context to a context state corresponding to the context associated with the first component if the current first context state and the context associated with the first component are not equal;

(c) installing the first component as part of the configuration;

(d) upon installing the first component as part of the configuration, changing a first state of the configuration to a second configuration state that includes the first component; and

(e) restoring the stored first context state upon completing installation of the first component without changing the second configuration state.

In other words, Cheng does not expressly disclose the steps above in which a "context state" is separate from a "configuration state."

However, Oberhauser discloses (a) storing the current context state (see, for example, step 135 in FIG. 6), (b) changing the current context state to a new context state (see, for example, FIGS. 7A and 7B), (c) installing code and (d) changing the current configuration state to a new configuration state (see, for example, step 141 in FIG. 6), and (e) restoring the stored context state without changing the new configuration state (see, for example, step 143 in FIG. 6).

The method of Oberhauser enables online changes to a software configuration even when it is necessary to change the context state (see, for example, column 2, lines 26-52).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to supplement the method of Cheng with the teachings of Oberhauser, so as to enable installation of components while the configuration is online.

With respect to claim 2 (currently amended), the claim is directed to a computer system that corresponds to the method of claim 1 (see the rejection of claim 1 above).

With respect to claim 4 (currently amended), the rejection of claim 1 is incorporated, and Cheng further discloses the limitation wherein the configuration comprises the configuration of a product that is a member of the group consisting of: automobiles, computer hardware, computer software, professional service products, financial service products, medical products, pharmaceutical products, and construction products (see, for example, column 2, line 62 to column 3, line 12, which shows that the configuration comprises the configuration of computer software).

With respect to claim 5 (previously presented), the rejection of claim 1 is incorporated, and Cheng further discloses the limitation wherein the context associated with the first component represents a limited set of additional components that are compatible as additions to a particular configuration with the first component (see, for example, column 15, lines 14-28, which shows that the context associated with a component represents a set of additional components compatible with the configuration of the component).

With respect to claim 6 (previously presented), the rejection of claim 1 is incorporated, and Cheng further discloses the limitation wherein the context associated with the first component represents a class of components that are compatible as additions to a particular configuration with the first component (see, for example, column 15, lines 14-28, which shows that the context associated with a component represents a class of additional components compatible with the configuration of the component).

With respect to claim 7 (previously presented), the rejection of claim 6 is incorporated, and Cheng further discloses the limitation wherein each component is associated with a context attribute that allows identification of the context of each component (see, for example, column 16, lines 6-15, which shows that each software component is associated with identifying information or attributes), the method further comprising:

(a) processing the context attribute associated with the installed first component to determine the context associated with the installed first component (see, for example, column 16, lines 6-15, which shows processing the identifying information or attributes to determine the context associated with the installed component).

With respect to claim 8 (previously presented), the rejection of claim 1 is incorporated, and Cheng further discloses the limitation wherein each associated context is a member of the group consisting of: a product line comprising compatible components, a current inventory, and a country of purchase (see, for example, column 10, lines 49-54, which shows that the context is a current inventory of software components).

With respect to claim 11 (currently amended), the claim is directed to a computer system that corresponds to the method of claim 4 (see the rejection of claim 4 above).

With respect to claim 12 (currently amended), the claim is directed to a computer system that corresponds to the method of claim 5 (see the rejection of claim 5 above).

With respect to claim 13 (currently amended), the claim is directed to a computer system that corresponds to the method of claim 6 (see the rejection of claim 6 above).

With respect to claim 14 (currently amended), the claim is directed to a computer system that corresponds to the method of claim 7 (see the rejection of claim 7 above).

With respect to claim 15 (currently amended), the claim is directed to a computer system that corresponds to the method of claim 8 (see the rejection of claim 8 above).

With respect to claim 21 (previously presented), the rejection of claim 1 is incorporated, and Oberhauser further discloses the limitation wherein if the first context state and the context associated with the first component are equal, the method further comprises:

(a) retaining the first context state as the current context state (see, for example, column 4, lines 45-52, which shows retaining the context state);

(b) installing the first component as part of the configuration while retaining the first context state as the current context state (see, for example, step 141 in FIG. 6); and

(c) upon installing the first component as part of the configuration, changing a first state of the configuration to a second configuration state that includes the first component while retaining the first context state as the current context state (see, for example, step 141 in FIG. 6).

With respect to claim 22 (currently amended), the rejection of claim 1 is incorporated, and the steps recited in the claim amount to a repetition of the steps recited claim 1 (see the rejection of claim 1 above). Cheng further discloses repeating the method for a plurality of components (see, for example, column 14, lines 45-64 and column 15, lines 14-28).

With respect to claim 24 (currently amended), the claim is directed to a computer system that corresponds to the method of claim 21 (see the rejection of claim 21 above).

With respect to claim 25 (currently amended), the claim is directed to a computer system that corresponds to the method of claim 22 (see the rejection of claim 22 above).

With respect to claim 27 (currently amended), the claim is directed to an apparatus that corresponds to the method of claim 1 (see the rejection of claim 1 above).

With respect to claim 31 (new), the claim is directed to a computer program product that corresponds to the method of claim 1 (see the rejection of claim 1 above).

7. Claims 9 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng in view of Oberhauser, as applied to claims 1 and 2 above, respectively, and further in view of U.S. Patent No. 5,721,824 to Taylor (art of record, "Taylor") in view of U.S. Patent No. 6,367,075 to Kruger et al. (art of record, "Kruger").

With respect to claim 9 (currently amended), the rejection of claim 1 is incorporated. Cheng in view of Oberhauser does not expressly disclose:

(a) as a result of installing the first component as part of the configuration, installing one or more additional components, wherein each additional installed component has an associated context; and

(b) storing nested context states associated with each context of each additional installed component.

However, Taylor discloses (a) installing one or more secondary components after installing the primary component, and (b) layering or nesting each component on an action list (see, for example, column 1, line 63 to column 2, line 12), so as to install multiple packages in a single operation (see, for example, column 1, lines 57-60).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to supplement the method of Cheng and Oberhauser with the teachings of Taylor, so as to install multiple components in a single operation.

Cheng in view of Oberhauser in view of Taylor does not expressly disclose:

(c) restoring a stored state of the context upon completing installation of the component further comprises restoring the stored state to an immediately preceding stored nested context state upon completing installation of each additional component by restoring the nested context states in reverse.

However, Kruger discloses storing a current context state of system (see, for example, column 4, lines 20-30) and building a tree to describe how to restore a stored state of the context (see, for example, column 4, lines 21-43). Kruger further discloses (c) restoring a stored state of the context by restoring nested context states in reverse (see, for example, column 9, lines 35-

48), so as to recover from an error in some or all of several updates (see, for example, column 1, lines 41-50).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to supplement the method of Cheng, Oberhauser and Taylor with the teachings of Kruger, so as to recover from an error after several components are installed.

With respect to claim 16 (currently amended), the claim is directed to a computer system that corresponds to the method of claim 9 (see the rejection of claim 9 above).

8. Claims 23, 26, 28-30 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng in view of Oberhauser, as applied to claims 1, 2, 27 and 31 above, respectively, and further in view of Taylor.

With respect to claim 23 (previously presented), the rejection of claim 1 is incorporated. Cheng in view of Oberhauser does not expressly disclose the limitation wherein changing a state of the configuration to a second configuration state that includes the first component further comprises:

(a) including one or more first additional components in the second configuration state if installing the first component as part of the configuration requires including the one or more first additional components..

However, Taylor discloses installing one or more additional required components after installing the primary component (see, for example, column 1, line 63 to column 2, line 12), so as to install multiple packages in a single operation (see, for example, column 1, lines 57-60).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to supplement the method of Cheng and Oberhauser with the teachings of Taylor, so as to install multiple components in a single operation.

Oberhauser further discloses:

(b) removing one or more second additional components in the second configuration state if installing the first component of the configuration requires removing the one or more second additional components (see, for example, column 4, lines 53-54, which shows that the new code may require deleting other components).

With respect to claim 26 (currently amended), the claim is directed to a computer system that corresponds to the method of claim 23 (see the rejection of claim 23 above).

With respect to claim 28 (new), the rejection of claim 1 is incorporated, and Cheng further discloses the limitation wherein the plurality of components of the configuration are selected from a group of components (see, for example, column 3, lines 32-39).

Cheng in view of Oberhauser does not expressly disclose:

(a) upon installing the first component as part of the configuration, determining whether to install one or more additional components based upon installation of the first component; and

(b) if one or more additional components are to be installed based upon installation of the first component, selecting the one or more additional components to be installed, wherein the context associated with the first component limits available choices from which the one or more additional components can be selected to a subset of the group of components.

However, Taylor discloses determining whether to install one or more additional components after installing the primary component (see, for example, column 1, line 63 to column 2, line 12), so as to install multiple packages in a single operation (see, for example, column 1, lines 57-60). Taylor further discloses that the primary component has associated information in the form of a dependency list, and that the dependency list associated with the primary component limits the selection of the one or more additional components to a particular subset of components (see, for example, column 2, lines 13-40).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to supplement the method of Cheng and Oberhauser with the teachings of Taylor, so as to install multiple components in a single operation.

With respect to claim 29 (new), the claim is directed to a computer system that corresponds to the method of claim 28 (see the rejection of claim 28 above).

With respect to claim 30 (new), the claim is directed to an apparatus that corresponds to the method of claim 28 (see the rejection of claim 28 above).

With respect to claim 32 (new), the claim is directed to a computer program product that corresponds to the method of claim 28 (see the rejection of claim 28 above).

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Yigdall whose telephone number is (571) 272-3707. The examiner can normally be reached on Monday through Friday from 7:30am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on (571) 272-3695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MY

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